

5-9-2015

# Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention

Monica Patrice McKenzie

Follow this and additional works at: [https://scholarworks.gsu.edu/iph\\_capstone](https://scholarworks.gsu.edu/iph_capstone)

---

## Recommended Citation

McKenzie, Monica Patrice, "Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention." , Georgia State University, 2015.  
[https://scholarworks.gsu.edu/iph\\_capstone/2](https://scholarworks.gsu.edu/iph_capstone/2)

This Capstone Project is brought to you for free and open access by the School of Public Health at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Public Health Capstone Projects by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact [scholarworks@gsu.edu](mailto:scholarworks@gsu.edu).

EFFECTIVE COMMUNITY EVENTS: AN IMPLEMENTATION TOOLKIT FOR OLDER  
ADULT FALLS PREVENTION

by

Monica Patrice McKenzie

B.S.H.S., Georgia Southern University

A Capstone Submitted to the Graduate Faculty of  
Georgia State University in Partial Fulfillment  
of the  
Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA  
30303

APPROVAL PAGE

EFFECTIVE COMMUNITY EVENTS: AN IMPLEMENTATION TOOLKIT FOR OLDER  
ADULT FALLS PREVENTION

by

MONICA PATRICE MCKENZIE

Approved:

---

Committee Chair

---

Committee Member

---

Date

## ABSTRACT

MONICA PATRICE MCKENZIE

Effective Community Events: An Implementation Toolkit For Older Adult Falls Prevention

(Under the direction of Dr. Laura Salazar)

Falls among older adults are responsible for significant morbidity and mortality. As the world's population ages, fall-related morbidity and mortality are expected to rise. Due to Florida's high percentage of older adults, Florida may experience a disproportionate burden of these increasing rates. The purpose of this capstone is to (1) guide organizations that serve older adults in planning, implementing, and sustaining community-wide fall prevention activities, and (2) institutionalize fall prevention events into the health departments' and community agencies' regular programming. This paper will address the epidemiology of older adult falls in Florida, the barriers to intervention, the methodology of the toolkit, and recommendations for future direction.

**KEYWORDS:** Older adult, falls, fall-related injury, fall-related deaths

## DEDICATION

I dedicate this capstone to my grandmother, Grace McKenzie, and many other older adults who have passed from fall-related injuries.

This capstone is also dedicated to my mother, Patricia McKenzie, and friends and family who motivated me when I had given up.

## ACKNOWLEDGMENTS

This capstone would not be possible without the diligent guidance and support of my committee members, Dr. Laura Salazar and Lisa VanderWerf-Hourigan. I would also like to thank the entire Injury Prevention Section at the Florida Department of Health for providing me the opportunity to complete my capstone.

## AUTHOR'S STATEMENT PAGE

In presenting this capstone as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this thesis may be granted by the author or, in his/her absence, by the professor under whose direction it was written, or in his/her absence, by the Associate Dean, College of Health and Human Sciences. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without written permission of the author.

---

Signature of Author

## NOTICE TO BORROWERS PAGE

All theses deposited in the Georgia State University Library must be used in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this capstone is:

Student's Name: Monica Patrice McKenzie

Street Address: 4052 Bald Cypress Way

City, State, and Zip Code: Tallahassee, Florida 32399

The Chair of the committee for this capstone is:

Professor's Name: Laura F. Salazar, Ph.D.

Department: School of Public Health

Georgia State University  
P.O. Box 3995  
Atlanta, Georgia 30302-3995

Users of this capstone who not regularly enrolled as students at Georgia State University are required to attest acceptance of the preceding stipulation by signing below. Libraries borrowing this capstone for the use of their patrons are required to see that each user records here the information requested.

NAME OF USER	ADDRESS	DATE	TYPE OF USE (EXAMINATION ONLY OR COPYING)



## Table of Contents

Dedication .....	iii
Acknowledgements .....	iv
Chapter I: Introduction.....	1
Chapter II: Review of Literature	
Global Older Adult Falls Public Health Burden .....	2
United States and Florida.....	2
Risk Factors .....	3
Interventions .....	5
Barriers.....	6
Chapter III: Methodology .....	9
Intervention Mapping.....	9
Chapter IV: Outcomes .....	13
Stage Theory of Organizational Change.....	13
Chapter V: Discussion .....	14
References .....	16
Appendix	
Toolkit.....	20

## Chapter I: Introduction

Falls among older adults are responsible for significant morbidity and mortality. As the world's population ages, fall-related morbidity and mortality are expected to rise. Due to Florida's high percentage of older adults, Florida may experience a disproportionate burden of these increasing rates. Intervention to help prevent older adult falls is an imperative. A recent evaluation of statewide older adult falls awareness activities by the National Council on Aging revealed a need for instruction and guidance on implementing community events. The purpose of this capstone is to (1) guide organizations that serve older adults in planning, implementing, and sustaining community-wide fall prevention activities, and (2) institutionalize fall prevention events into the health departments' and community agencies' regular programming. Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention supplements current resources that offer strategies, tools, techniques, and ideal interventions for older adult fall prevention, such as the second edition of *CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults*, and the National Council on Aging's *Falls Prevention Awareness Day Media Toolkit*. The toolkit is also an adaptation and expansion of the *Preventing Falls: How to Develop Community-based Fall Prevention Programs for Older Adults*. Unlike other resources, this toolkit is specifically designed for county health departments and other local health agencies that serve older adults in Florida. Nonetheless, this toolkit can be useful to any agency with an interest in older adult falls, such as, but not limited to community-based organizations, faith-based organizations, or the private sector in any state. This paper will address the epidemiology of older adult falls in Florida, the barriers to intervention, the methodology of the toolkit, and recommendations for future directions.

## **Chapter II: Review of Literature**

### **Global Older Adult Falls Public Health Burden**

Falls among older adults are a significant public health problem of international concern (Stubbs, Schofield, Binnekade, Patchay, Sepehry, & Eggermont, 2014). Agmon, Belza, Nguyen, Logsdon, and Kelly (2014) project that approximately 20% of western countries' populations will be 70 years and older in 2020. Accompanying this growth of the older adult population will be a rise in fall-related injuries and deaths (Grabiner, Crenshaw, Hurt, Rosenblatt, & Troy, 2014). Falls, which occur when one unintentionally comes to rest on the ground, floor, or lower level (Chase, Mann, Wasek, & Arbesman, 2012), are associated with rising health expenditures (Ng, & Tan, 2013). The total medical cost of fall-related injuries among older adults in the United States is expected to reach \$67.7 billion by 2020, over double the \$30 billion direct medical burden in 2012 (Centers of Disease Control and Prevention, 2014).

### **United States and Florida**

Approximately one-third of community-dwelling older adults fall each year in the United States (Ambrose, Paul, & Hausdorff, 2013). This incidence rate rises with age; one-half of community-dwelling older adults aged 85 or older experience a fall (Segev-Jacobovski, Herman, Yogev-Seligmann, Mirelman, Giladi, & Hausdorff, 2011). This number could be greater due to evidence that 75-80% of falls go unreported if they do not result in injury (Ambrose, Paul, & Hausdorff, 2013). This is of great concern considering that the number of adults 65 or older in the United States is projected to reach 71 million by 2030 (Reed-Jones, Solis, Lawson, Loya, Cude-Islas & Berger, 2013). Florida has the highest percentage of older adults in the United States (Administration on Aging, 2015). In addition, Florida unintentional older adult falls

mortality rate (63.8 per 100,000) exceeded the national average of 56.07 per 100,000 in 2012 (Florida Department of Health, 2014a; CDC, 2015).

Five percent of falls result in fracture and another 5 percent result in severe consequences (Stubbs, Schofield, Binnekade, Patchay, Sepehry, & Eggermont, 2014). Hip fractures are the most common serious fall-related injury in older adults (Hawley-Hague, Boulton, Hall, Pfeiffer, & Todd, 2014). The rate of sustaining a hip fracture after a fall is only 1%; however, 90% of hip fractures are the result of a fall (Ambrose, Paul, & Hausdorff, 2013). Of those that sustain a hip fracture, 25% of older adults will perish in the following year (Ambrose, Paul, & Hausdorff, 2013). Falls are a risk factor for traumatic brain injury, soft tissue injuries, dislocations, and chronic pain (Karlsson, Magnusson, von Schewelow, & Rosengren, 2013). Moreover, approximately half of older adults who fall are unable to rise and remain on the ground, resulting in pressure sores, dehydration, and pneumonia (Ambrose, Paul, & Hausdorff, 2013). In addition, falls are the leading cause of injury deaths among older adults in Florida (Florida Department of Health, 2014b). Traumatic brain injury, alone, was associated with 57% of fall-related deaths among Floridians, ages 65 and older (Florida Department of Health, 2014a).

### **Risk Factors**

Falls have a multifactorial etiology (Agmon et al., 2014). Many of the independent risk factors for falls are preventable or easily treated; however some risk factors, such as gender, race, and age cannot be modified. Fall disparities between genders are noteworthy. Women are more likely to fall and sustain injuries, but men are more likely to have a fatal fall (Florida Department of Health, 2014a). Racial differences are also significant. In 2012, 91% of older adult fall-related hospitalizations and deaths were among the White population in Florida (Florida Department of

Health, 2014a). Age is also a significant risk factor for falls. Older adults are at a greater risk for injury due to normal age-related physical declines in all body systems (Ambrose, Paul, & Hausdorff, 2013). Among those declines are body orienting reflexes, muscle strength and tone, step length, and height; each restricting the ability to circumvent a trip or slip-causing fall (Ambrose, Paul, & Hausdorff, 2013). Low body mass, medical comorbidities and use of certain medications (benzodiazepines, diuretics, anti-seizure medications, etc.) are all risk factors for falls (Karlsson et al., 2013). Common medical comorbidities such as diabetes, prior CVD, incontinence, arthritis are also associated with older adult falls (Ambrose, Paul, & Hausdorff, 2013). In addition, visual impairment is an independent risk factor for older adult falls and is among the top ten causes of disability in the United States (Reed-Jones et al., 2013).

Polypharmacy, particularly the use of four or more medications, also significantly increases the risk of falling (Reed-Jones et al., 2013). Chronic pain is associated with older adult falls.

Community-dwelling older adults who suffer from chronic pain are more likely to have fallen in the past 12 months, and are more liable to fall in the future (Stubbs et al., 2014a). Depression can produce an inability to maintain a stable walking pattern, which increases one's risk of falls (Launay, De Decker, Annweiler, Kabeshova, Fantino, & Beauchet, 2013). In addition to the biological risk factors, falls are also increased by behavioral factors. Most adults over the age of 65 do not regularly engage in physical activity, and even if the amount of physically active older adults were to double, the number of falls in the United States would continue to rise (Grabiner et al., 2014). Moreover, a history of falls is the greatest predictor of more falls among the older adult population (Karlsson et al., 2013). Recurrent falls, defined as two or more falls over a 12 month period (Launay et al., 2013), are associated with more pronounced loss of physician contact, social isolation, loss of confidence, greater functional decline, increased admission in

long-term care, and death (Stubbs et al., 2014a). In addition, fall hazards in the home such as footwear, loose rugs, poor lighting, unstable furniture, and lack of grab bars or railings significantly increases the risk for falls (Ambrose, Paul, & Hausdorff, 2013). Furthermore, the risk of falls increases with the presence of additional risk factors (Karlsson et al., 2013).

## **Interventions**

Falls among older adults have multiple risk factors; therefore, utilizing multifactorial approaches to older adult fall prevention is imperative. Multifactorial interventions can reduce the monthly rate of falling by older adults (Grabiner et al., 2014). Falls can be decreased through medication management, vitamin D/calcium supplementation, vision screenings, exercise/physical activity programs, education on health and safety, and home modifications (Chase et al., 2012). The most important components of a multicomponent exercise program are as follows: balance training, muscle strength training, flexibility, and then endurance (Karlsson et al., 2013). Home modifications include hazard identification, assistive technology/devices, and structural changes in and around the residence (Chase et al., 2012). Information and Communication Technologies (ICTs) such as personal emergency alarms, home automation systems, portable computers, video conferencing, robotics, and game consoles have emerged to prevent falls (Hawley-Hague et al., 2014). Game consoles in fall prevention have shown progress in obstacle collisions in older adults participating in regular physical activity and video gaming (Reed-Jones et al., 2013). Video game approaches that integrate visual training with physical activity enables the inclusion of vision based interventions with known mobility and function increasing evidenced-based interventions for older adults (Reed-Jones et al., 2013). Whether the interventions are home-based, exercises-based or videos, developing effective multifactorial

older adult falls prevention interventions require multiple disciplines such as physical therapy, optometry, nursing, pharmacy, fitness, and health education.

## **Barriers**

Unfortunately, older adults are a very heterogeneous group (Hanson, Salmoni, & Doyle, 2009), and many of the current older adult fall interventions are not effective for all older adult populations. Efficacy of fall prevention interventions may be different for institutionalized and non-institutionalized older adults (Guo, Tsai, Liao, Tu, & Huang, 2014). Most studies and meta-analyses have only examined the impact of fall prevention interventions in older adults with normal cognition and with no impairment (Guo et al., 2014); despite extensive research that supports cognitive function and its relation to fall risk (Segev-Jacobovskii et al., 2011). This is a cause for concern because 22% of older adults, ages 71 years and older, have cognitive impairment without dementia (Enkelaar, Smulders, van Schroyenstien Lantman-de Valk, Weerdesteyn, & Geurts 2013). Furthermore, 60% of cognitively impaired older adults fall annually, and this frequency increases to 80% in older adults with dementia (Segev-Jacobovskii et al., 2011). Cognitively impaired adults are more likely to fall and sustain fall-related injuries than older adults who are not cognitively impaired (Enkelaar et al., 2013). Current multifactorial interventions are not effective in preventing falls in the cognitively impaired (Guo et al., 2014).

Multifactorial interventions may not be as successful because some important risk factors are yet to be addressed or identified (Stubbs et al., 2014a). Approximately 76% of community-dwelling older adults experience pain, an often overlooked and significant risk factor for falls (Stubbs et al., 2014a). The location and the duration of the chronic pain may increase the risk of

falls; however, due to the limited research on the association of falls and pain, it is not possible to determine which types, locations, or duration of pain is associated with increased fall risk (Stubbs et al., 2014b). The association between pain and falls may be complex because pain is a very multifarious issue (Stubbs et al., 2014a). There is also limited assessment and research on the impact of many older adult fall risk factors and consequences, including vision impairment, fear of falling, and fractures. Vision loss is the third most common chronic condition among older adults and is often underreported (Reed-Jones et al., 2013). In addition, fear of falling is associated with reduced quality of life (Ng & Tan, 2013). This fear produces a restriction in daily activities, decline in physical fitness, social isolation, and depression, which further increases the risk for falls (Ambrose, Paul, & Hausdorff, 2013). A third of older adults develop a fear of falling, even in the absence of fall injury or no physical injury after sustaining a fall (Segev-Jacubovski et al., 2011). In addition, insufficient studies are available to determine the proper effect of exercise on overall fractures, a common consequence of falls (Kemmler, Häberle, & von Stengel 2013).

Falls are often inadequately reported and scarcely understood (Willgoss, Yohannes, & Mitchell, 2010). Falls are a multifactorial public health problem; however, the lack of training on and the lack of assessment of fall risk by health professionals is a significant barrier to older adult fall prevention. Although there is evidence to support the association between falls and depression, the relationship is rarely detected in clinical practice because evaluating depression can be both tedious and challenging in daily clinical practice (Launay et al., 2013). Fear of falling has a significant negative impact on an older adult's life (Coelho, Gonçalves, Purkis, Pocinho, Pachana, & Byrne, 2010).



Self-report is a challenge to fall research due to the fact that older adults may avoid revealing falls to prevent or deter stereotyping, discrimination, devaluation, and stigmatization (Hanson, Salmoni, & Doyle, 2009). Falls and fall prevention programs can threaten autonomy and personal identity; thus, the benefits of involvement in a fall prevention program must outweigh any costs such as perceived threat to personal identity and independence (Hanson, Salmoni, & Doyle, 2009). Fear of falling is a phobia of a real physical threat, and an intervention that targets improving core strength may be more effective than an intervention that targets reducing anxiety (Coelho et al., 2010). In addition, recognizing the influence of stigma on reporting and the discussion of falls is essential to intervention recruitment and efficient falls prevention research (Hanson, Salmoni, & Doyle, 2009).

Multifactorial approaches play a significant role in reducing the fear of falling, reducing the risk of falling and maintaining independence among older adults (Chase et al., 2012). Health professionals needed to address falls vary, but include physical therapists, nurses, social workers, and clinicians (Chase et al., 2012). Older adult fall prevention will be more effective if it is implemented in all facets of healthcare and within the clinical practice (Karlsson et al., 2013).

### **Chapter III: Methodology**

Intervention mapping and Stage Theory of Organizational Change served as frameworks for the implementation toolkit. Intervention mapping provides a six-step process to guide the development of health promotion programs. The steps are as follows: need assessments, matrices, theory-based intervention methods and practical applications, intervention program, adoption and implementation, and evaluation plan (Schmid, Andersen, Kent, Williams, & Damush, 2010). The toolkit provides guidance and resources to complete each step of the intervention mapping model for an older adult falls prevention community event. Incorporating Stage Theory of Organizational Change in the formation of the implementation toolkit accomplishes the objective of the implementation toolkit, which is to institutionalize fall prevention activities into the health departments' and community agencies' regular programming. Stage Theory of Organizational Change are (1) awareness of a problem and possible solutions, (2) decision to adopt the innovation, (3) implementation that includes redefining the innovation and modifying organizational structures to accommodate it, and (4) institutionalization or making the innovation part of the organization's ongoing activities (Glanz, Rimer, & Viswanath, 2008). The implementation toolkit provides tools and direction to move health agencies from one stage of organizational change to another.

#### **Intervention Mapping**

**Needs Assessment.** The Florida Department of Health assisted the National Council on Aging to complete a survey to assess Florida's activities on and around September 23, 2014, the 7<sup>th</sup> Annual Fall Prevention Awareness Day. Results from this survey revealed that some agencies had challenges or did not conduct fall awareness activities due to poor communication, time, lack of partnership, and poor promotion (National Council on Aging, 2015). The results of this survey

served as a rationale for creating the implementation toolkit. In addition, information and data collected from Florida's injury surveillance, national health agencies, and PubMed also revealed a need for older adult prevention in the state of Florida.

**Matrices of change objective.** The Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention was designed to (1) help users understand how to plan, implement, and sustain community-wide fall prevention activities for older adults, and (2) to institutionalize fall prevention activities into the health departments' and community agencies' regular programming.

**Theory-based intervention methods and practical applications.** Intervention mapping and Stage Theory of Organizational Change served as frames for the implementation toolkit. These theories provided practical strategies to achieve the objective of the toolkit.

**Intervention program.** Unlike other resources, the implementation toolkit is specifically designed for county health departments and other local health agencies that serve older adults in Florida. However, the toolkit can be useful to any agency with an interest in older adult falls, such as, but not limited to community-based organizations, faith-based organizations, or the private sector in any state. Table 1 lists the components of the implementation toolkit.

Table 1

*Components of Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention*

Component	Description
<b>Sections</b>	
Part 1. Older Adult Falls-What Are They?	Defines what older adults falls are, the public health burden of falls, and the various factors that increase fall risk
Part 2. What Can We Do?	Describes current evidence-based programs and awareness activities that can be implemented in community events for older adult fall prevention
Part 3. How Do We Conduct a Community Event?	Details the process of planning and implementing interventions and activities through checklists and resources
Part 4. How Do We Promote Our Event?	Explains essential techniques and strategies to promote an event and engage community members and key stakeholders
Part 5. How Do We Know It Was Successful?	Describes ways to sustain and evaluate the effectiveness of the chosen event from beginning to end
Part 6. Where Can We Learn More?	Lists key organizations and resources that event planners can partner with to expand and fund fall prevention efforts
Appendices	Contains nine templates to complete each step of the community event planning process and advance organizations up the Stage Theory of Organizational Change
<b>Subsections</b>	
Summary	A brief account of the main points
Key Terms	Definitions of fundamental and/or unfamiliar words
Resources	Technical assistance tools
Consider This	An additional tip to use when planning a community event
Did You Know?	Details new or less known facts and innovations in fall prevention
Resource Spotlight	Highlights a useful tool to use when planning community events

**Adoption and implementation.** The Florida Injury Prevention Advisory Council (FIPAC) will peer-review the implementation toolkit. FIPAC functions to assist in the development, implementation, and evaluation of Florida's injury prevention state plans, and to provide research and expertise in injury prevention. FIPAC consists of approximately fifty representatives from a diverse array of agencies and organizations throughout the state of Florida. Following the peer-review, the implementation toolkit will be reviewed for departmental approval by the Injury Prevention Section, the Bureau Chief, the Division Director, and the Communication Director at the Florida Department of Health. After approval, the toolkit will be published on the Florida Department of Health Injury Prevention Section website and disseminated to stakeholders through email.

**Evaluation plan.** Community stakeholders will receive an evaluation survey following month one and month six after the toolkit becomes available to the public. The evaluation will assess the utility, usability, and relevance of the toolkit.

## Chapter IV: Outcomes

The final product is a 38-page older adult fall prevention implementation toolkit for county health departments and other local health agencies in Florida. The implementation toolkit uses various tools and techniques to progress community agencies through the stages of organizational change.

### Stage Theory of Organizational Change

**Awareness of a problem and possible solutions.** *Part 1: Older Adult Falls-What Are They?* educates community organizations on the risk factors, and the significant physical, personal, social, and economic consequences of falls. *Part 2: What Can We Do?* highlights and describes current evidence-based programs and awareness activities for older adult fall prevention, such as Tai Ji Quan: Moving for Better Balance and conducting medication reviews. Throughout the toolkit, subsections entitled *Resource Spotlight* also directs community organizations to tools and organizations that further define and promote awareness of older adult fall prevention.

**Decision to adopt the innovation.** *Part 3: How Do We Conduct A Community Event?*, *Appendix C: Need/Community Assessment Resource Chart*, and *Appendix D: Need/Community Assessment* guide the community organizations through conducting a needs assessment. *Appendix D: Need/Community Assessment* assists organizations in identifying essential questions, providing strategies and resources to answer those questions, guiding the community organizations through the identification of key findings, and determining what actions are needed to address older adult falls within the organizations' community. *Appendix E: Community Events* guides the community agencies through the decision to adopt an intervention by determining goals and objectives that address the actions needed.

**Implementation.** *Part 3: How Do We Conduct A Community Event?, Part 4:How Do We Promote Our Event?, Appendix B: Community Event Planning Leads, Appendix F: Event Planning, Appendix G : Budget Planning, and Appendix H: Checklist for Effective Print Materials for Older Adults* offer techniques and strategies to promote and implement a community event, including direction on messaging and advertising.

**Institutionalization.** *Part 5: How Do We Know It Was Successful, Part 6: Where Can We Learn More?, Appendix A: Community Event Planning Timeline, and Appendix I-Evaluation Template* instruct the community organizations on how to evaluate and sustain older adult fall prevention activities.

## **Chapter V: Discussion**

Fall-related injuries and fall-related falls are expected to rise over the next two decades. Health departments and local agencies must intervene at the personal level, community level, and the population level. Health departments and local agencies can support and sustain older adult prevention activities by designating a staff person(s) that will be responsible for older adults fall prevention events and activities. This delegation establishes a project lead and persons responsible for coordinating community events. Establishing an ongoing and committed coalition or partnership for older adult fall prevention can also sustain and support older adult activities. Partnerships and coalitions convene representatives from different sectors, and these sectors often have political and financial capacity to support fall prevention activities. Health departments and local agencies can also sustain falls prevention activities by conducting, updating, and disseminating older adult fall surveillance on a regular basis. These periodic updates in surveillance will assess the public health burden of falls and determine if fall prevention efforts have any impact. This surveillance can also advise future directions and community events. Installing older adult fall prevention activities in organizations' regular programmatic procedures is another way organizations can sustain older adult fall prevention activities. This installation can create a cultural norm that fall prevention is important and is an issue in which each employee and each community member should address. Generating support from agency and community leaders is also imperative to fall prevention. These gatekeepers can promote and garner followers and support throughout the community. This support can also produce advocacy for policy and legislature, which is another significant step in promoting older adult fall prevention within organizations and the communities. Health departments and local agencies can also sustain older adult fall prevention activities by securing long-term financial



sponsorships from organization and partners. Sustainability of fall prevention activities can all occur by developing support and rapport with media outlets. Media promote awareness and influence social norms.

### References

- Administration on Aging. (2015). A profile of older Americans: 2013. Retrieved from [http://www.aoa.gov/Aging\\_Statistics/Profile/2013/docs/2013\\_Profile.pdf](http://www.aoa.gov/Aging_Statistics/Profile/2013/docs/2013_Profile.pdf)
- Agmon, M., Belza, B., Nguyen, H.Q., Logsdon, R.G., & Kelly, V.E. (2014). A systematic review of interventions conducted in clinical or community settings to improve dual-task postural control in older adults. *Clinical Interventions in Aging*, 9, 477-492. doi: 10.2147/CIA.S54978
- Ambrose, A.F., Paul, G., & Hausdorff, J.M. (2013). Risk factors for falls among older adults: A review of the literature. *Maturitas*, 75(1), 51-61. doi: 10.1016/j.maturitas.2013.02.009
- Centers of Disease Control and Prevention. (2014). Costs of falls among older adults. Retrieved from <http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html>
- Centers for Disease Control and Prevention. (2015). [2012, United States Unintentional Fall Deaths and Rates per 100,000 ICD-1- Codes: W000-W19]. Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved from <http://webappa.cdc.gov/cgi-bin/broker.exe>.
- Chase, C.A. Mann, K., Wasek, S., & Arbesman, M. (2012). Systematic review of the effect of home modification and fall prevention programs on falls and the performance of community-dwelling older adults. *American Journal of Occupational Therapy*, 66, 284-291. doi: 10.5014/ajot.2012.005017
- Coelho, C.M., Gonçalves, D.C., Purkis, H., Pocinho, M., Pachana, N.A., & Byrne G.J. (2010). Specific phobias in older adults: Characteristics and differential diagnosis. *International Psychogeriatrics*, 22(5), 702-711. doi: 10.1017/S1041610210000505

- Enkelaar, L., Smulders, E., van Schrojenstein Lantman-de Valk, H., Weerdesteyn, V., & Geurts, A.C. (2013). Prospective study on risk factors for falling in elderly persons with mild to moderate intellectual disabilities. *Research in Developmental Disabilities*, 34(11):3754-3765. doi: 10.1016/j.ridd.2013.07.041
- Florida Department of Health. (2014a). Injury facts- unintentional older adults falls. Retrieved from [http://www.floridahealth.gov/statistics-and-data/florida-injury-surveillance-system/\\_documents/data-fact-sheets/older-adult-falls-2012.pdf](http://www.floridahealth.gov/statistics-and-data/florida-injury-surveillance-system/_documents/data-fact-sheets/older-adult-falls-2012.pdf)
- Florida Department of Health. (2014b). Older adult falls prevention. Retrieved from <http://www.floridahealth.gov/programs-and-services/prevention/older-adult-falls-prevention/index.html>
- Glanz, K., Rimer, B.K., & Viswanath, K. (Eds.) (2008). *Health behavior and health education: theory, research, and practice (4<sup>th</sup> ed.)*. San Francisco: Jossey-Bass
- Grabiner, M.D., Crenshaw, J.R., Hurt, C.P., Rosenblatt, N.J., & Troy, K.L. (2014). Exercised-based fall prevention: Can you be a bit more specific? *Exercise and Sport Sciences Reviews*, 42(4):161-168. doi: 10.1249/JES.0000000000000023
- Guo, J.L., Tsai, Y.Y., Liao, J.Y., Tu, H.M. & Huang, C.M. (2014). Interventions to reduce the number of falls among older adults with/without cognitive impairment: An exploratory meta-analysis. *International Journal of Geriatric Psychiatry*, 29(7), 661–669. doi: 10.1002/gps.4056
- Hawley-Hague, H., Boulton, E., Hall, A., Pfeiffer, K., & Todd, C. (2014). Older adults' perceptions of technologies aimed at falls prevention, detection or monitoring: A systematic review. *International Journal of Medical Informatics*, 83, 416-426. doi: 10.1016/j.ijmedinf.2014.03.002

- Hanson, H.M., Salmoni, A.W., & Doyle, P.C. (2009). Broadening our understanding: Approaching falls as a stigmatizing topic for older adults. *Disability and Health Journal*, 2(1):36-44. doi: 10.1016/j.dhjo.2008.11.001
- Karlsson M.K., Magnusson, H., von Schewelow, T., & Rosengren, B.E. (2013) Prevention of falls in the elderly-A review. *Osteoporosis International*, 24(3), 747-762. doi: 10.1007/s00198-012-2256-7
- Kemmler, W., Häberle, L., & von Stengel, S. (2013). Effects of exercise on fracture reduction in older adults: A systematic review and meta-analysis. *Osteoporosis International*, 24(7):1937-1950. doi: 10.1007/s00198-012-2248-7
- Launay, C., De Decker, L., Annweiler, C., Kabeshova, A., Fantino, B., & Beauchet, O. (2013). Association of depressive symptoms with recurrent falls: A cross-sectional elderly population based study and a systematic review. *The Journal of Nutrition, Health, & Aging*, 17(2), 152-157. doi: 10.1007/s12603-012-0370-z
- National Council of Aging. (2015). Falls Prevention Awareness Day 2014- Strong Today, Falls Free® Tomorrow: a compendium of state and national activities. Retrieved from <http://www.ncoa.org/assets/files/pdf/center-for-healthy-aging/Final-2014-Falls-Prevention-Awareness-Day-Compendium.pdf>
- Ng, C.T., & Tan, M.P. (2013). Osteoarthritis and falls in the older person. *Age and Ageing*, 42(5):561-566. doi: 10.1093/ageing/aft070
- Reed-Jones, R.J., Solis, G.R., Lawson, K.A., Loya, A.M., Cude-Islas, D., & Berger, C.S. (2013). Vision and falls: A multidisciplinary review of the contributions of visual impairment to falls among older adults. *Maturitas*, 75(1), 22-28. doi: 10.1016/j.maturitas.2013.01.019

- Schmid, A.A., Andersen, J., Kent, T., Williams, L.S., & Damush, T.M. (2010). Using intervention mapping to develop and adapt a secondary stroke prevention program in Veterans Health Administration medical centers. *Implementation Science*, 5:97. doi: 10.1186/1748-5908-5-97.
- Segev-Jacobovski, O., Herman, T., Yogev-Seligmann, G., Mirelman, A., Giladi, N., & Hausdorff, J.M. (2011). The interplay between gait, falls, and cognition: Can cognitive therapy reduce fall risk? *Expert Review of Neurotherapeutics*, 11(7), 1057-1075. doi: 10.1586/ern.11.69
- Stubbs, B., Binnekade, T., Eggermont, L., Sepehry, A.A., Patchay, S., & Schofield, P. (2014). Pain and the risk for falls in community-dwelling older adults: Systematic review and meta-analysis. *Archives of Physical Medicine and Rehabilitation*, 95(1), 175-187. doi: 10.1016/j.apmr.2013.08.241
- Stubbs, B., Schofield, P., Binnekade, T., Patchay, S., Sepehry, A., & Eggermont, L. (2014). Pain is associated with recurrent falls in community-dwelling older adults: Evidence from a systematic review and meta-analysis. *Pain Medicine: The Official Journal of the American Academy of Pain Medicine*, 15(7), 1115-1128. doi: 10.1111/pme.12462



# Effective Community Events

## **An Implementation Toolkit for Older Adult Falls Prevention**

Introduction	i
Audience and Purpose	i
How to Use Toolkit	i
Part 1: Older Adult Falls-What Are They?	1
Part 2: What Can We Do?	5
Part 3: How Do We Conduct a Community Event?	9
Part 4: How Do We Promote Our Event?	15
Part 5: How Do We Know It Was Successful?	20
Part 6: Where Can We Learn More?	22
Appendices	24

2015 Edition

Author: Monica Patrice McKenzie, CHES

## Introduction

Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention provides guidance and resources on planning, communication and engagement, funding, and assessment of older adult falls prevention community activities. This toolkit supplements current resources that offer strategies, tools, techniques, and ideal interventions for older adult fall prevention, such as the second edition of *CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults*, and the *National Council on Aging's Falls Prevention Awareness Day Media Toolkit*.

Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention is an adaptation and expansion of the *Preventing Falls: How to Develop Community-based Fall Prevention Programs for Older Adults* for Florida's organizations that serve older adults. Community event planners who want to learn more about older adult fall prevention activities can refer to this document and several other recommended sources in the references section at the end of each section of the toolkit.

## Audience and Purpose

Unlike other resources, this toolkit is specifically designed for county health departments and other local health agencies that serve older adults in Florida. Nonetheless, this toolkit can be useful to any agency with an interest in older adult falls, such as, but not limited to community-based organizations, faith-based organizations, or the private sector in any state.

Effective Community Events: An Implementation Toolkit for Older Adult Falls Prevention was designed to (1) help users understand how to plan, implement, and sustain community-wide fall prevention activities for older adults, and (2) institutionalize fall prevention events into the health departments' and community agencies' regular programming.

## How to Use this Toolkit

This toolkit consists of six parts and the appendices section. Although components of the event planning process are discussed separately, many components are implemented simultaneously. Please read through each section before utilizing any tool or starting your event planning.

**Part 1. Older Adult Falls-What Are They?** defines what older adults falls are, the public health burden of falls, and the various factors that increase fall risk.

**Part 2. What Can We Do?** describes current evidence-based programs and awareness activities that can be implemented in community events for older adult fall prevention.

**Part 3. How Do We Conduct a Community Event?** details the process of planning and implementing interventions and activities through checklists and resources.

**Part 4. How Do We Promote Our Event?** explains essential techniques and strategies to promote an event and engage community members and key stakeholders.

**Part 5. How Do We Know It Was Successful?** describes ways to sustain and evaluate the effectiveness of the chosen event from beginning to end.

**Part 6. Where Can We Learn More?** lists key organizations and resources that event planners can partner with to expand and fund fall prevention efforts.

**Appendices.** consist of tools, checklists, directories, and organizational timelines.

Each part of the toolkit also ends with a summary, key terms, and resources.

Throughout the toolkit are subsections entitled *Consider This*, *Did You Know?*, and *Resource Spotlight*.

An example and definition of each subsection is illustrated below.

**Consider This** is an additional tip to use when planning a community event.

**Resource Spotlight** highlights an effective tool to use when planning community events.



**DID YOU KNOW?**  
details new or less known facts  
and innovations in fall prevention.



## PART 1: Older Adult Falls- What Are They?

### Who are older adults?

Although the definition of an older adult varies, for the purposes of this toolkit an older adult is defined as anyone ages 65 and older.<sup>1</sup> This definition may be simplistic, but it refers to a very broad and diverse population. Older adults include several generations. Strategies that target individuals in their 60s may not be applicable for those in their 80s and 90s.

In addition to age, older adults differ in culture, race, gender, cognitive and physical ability, social status, and residence type. Contrary to media depictions, not all older adults are hearing impaired, senile, or institutionalized (reside in nursing homes). Many older adults are active, productive citizens of society.

**Consider This:** Older adults that are in their 60s are children of older adults in their 80s and 90s. Do not assume that interventions and activities targeted towards older adults in their 80s and 90s will be as effective as those targeted towards those in their 60s. Make sure that your community event is culturally competent.

Older adults are very different, and the proportion of older adults in this country is increasing.<sup>2</sup> By 2030, the number of adults 65 or older in the United States is projected to reach 71 million.<sup>3</sup> Accompanying this growth of the older adult population may be a significant rise in fall-related injuries and deaths if fall prevention efforts do not increase.<sup>4</sup>

### What is an older adult fall?

A fall is the act of unintentionally coming to rest on the ground, floor or lower level.<sup>5</sup> Approximately one-third of community-dwelling older adults fall each year in the United States.<sup>6</sup> This incidence rate rises with age; one-half of community-dwelling older adults ages 85 or older experience a fall.<sup>7</sup>

### What is the cost?

The total medical cost of fall-related injuries among older adults in the United States is expected to reach \$67.7 billion by 2020.<sup>1</sup> This cost exceeds double the \$30 billion direct medical burden in 2012.<sup>1</sup>

In 2012, the median admission charge for hospitalizations among Florida's older adults who had a non-fatal fall was \$48,012.<sup>8</sup> These charges resulted in a total cost that exceeded \$2.67 billion. The median length of stay for a fall-related injury was four days and most patients (87%) received continued medical care after hospital discharge.<sup>8</sup> In other words, only 13% of patients went directly home without care. In addition, Medicare paid for 96% of these hospitalizations.<sup>8</sup>

### Who is at risk?

Falls have many causes, and many of these causes are preventable or easily treated.<sup>2</sup> However some causes or risk factors, such as gender, race, and age cannot be changed. Below is a list of common risk factors for older adult falls.

**Table 1. Risks Factors for Older Adult Falls**

<b>Risk Factor</b>	<b>Explanation</b>
<b>Age</b>	Falls increase with age. <sup>6</sup> Older adults are at a greater risk for injury due to normal age-related physical declines in all body systems. <sup>6</sup> Among those declines are body orienting reflexes, muscle strength and tone, step length, and height; each restricting the ability to circumvent a trip or slip-causing fall. <sup>6</sup>
<b>Gender</b>	Women are more likely to fall and sustain injuries, but men are more likely to die from a fall. <sup>9</sup>
<b>Race</b>	Whites are more likely to fall and sustain injuries than any other race. <sup>9</sup>
<b>Chronic health conditions</b>	Chronic health conditions such as diabetes, prior cardiovascular disease, incontinence, arthritis increases an older adults' risk of falling by impairing normal body functions that protect against falls. <sup>6</sup>
<b>Vision</b>	Vision loss is the third most common chronic condition among older adults. <sup>3</sup> Presbyopia, cataracts, glaucoma, and macular degeneration are the most common causes of visual impairments. <sup>3</sup> Visual impairments reduce an older adult's ability to detect environmental hazards. <sup>3</sup>
<b>Environmental fall hazards</b>	Fall hazards in the home such as footwear, loose rugs, poor lighting, unstable furniture, and lack of grab bars or railings significantly increases the risk for falls. <sup>6</sup>
<b>Inactivity</b>	Physical inactivity reduces muscle strength and tone, as well as body orienting reflexes that reduced fall risk. <sup>6</sup>
<b>Medications</b>	Certain medications such as benzodiazepines, diuretics, anti-depressants and anti-seizure medications, etc <sup>10</sup> increase fall risk. Furthermore, polypharmacy, particularly the use of four or more medications, also significantly increases the risk of falling. <sup>3</sup>
<b>Chronic Pain</b>	Community-dwelling older adults who suffer from chronic pain are more likely to have fallen in the past 12 months, and are more liable to fall in the future. <sup>11</sup>
<b>Depression</b>	Depression can produce an inability to maintain a stable walking pattern, which increases one's risk of falls. <sup>12</sup>
<b>Cognitive Impairments</b>	Cognitively impaired adults are more likely to fall and sustain fall-related injuries than older adults who are not cognitively impaired. <sup>13</sup>
<b>Fear of falling</b>	A third of older adults develop a fear of falling, even in the absence of fall injury or physical injury after sustaining a fall. <sup>7</sup> This fear produces a restriction in daily activities, a decline in physical fitness, social isolation, and depression. <sup>6</sup>
<b>History of falls</b>	A history of falls is the greatest predictor of more falls among the older adult population. <sup>10</sup> Recurrent falls, defined as two or more falls over a 12 month period, <sup>12</sup> are associated with more pronounced loss of physician contact, social isolation, loss of confidence, greater functional decline, increased admission in long-term care, and death. <sup>11</sup>
<b>Additional Risk Factors</b>	The risk of falls increases with the presence of additional risk factors. In other words, the more fall risk an older adult has, the more likely he/she will fall. <sup>10</sup>

## What are the consequences of falls?

Falls are the leading cause of fatal and non-fatal injuries among Florida's older adult population and result in significant physical, personal, social and economic burden.<sup>9</sup>



Falls can result in the following:

- Fractures, especially hip fractures<sup>9</sup>
- Traumatic brain injury<sup>9</sup>
- Soft tissue injuries<sup>10</sup>
- Dislocations<sup>10</sup>
- Chronic pain<sup>11</sup>
- Social Isolation<sup>7</sup>
- Decreased quality of life<sup>6</sup>
- Pressure sores<sup>6</sup>
- Pneumonia<sup>6</sup>
- Fear of falling<sup>9</sup>
- Recurrent falls<sup>12</sup>
- Death<sup>9</sup>

### DID YOU KNOW?

Hip fractures are the most common serious fall-related injury in older adults.<sup>14</sup> The rate of sustaining a hip fracture after a fall is only 1%; however, 90% of hip fractures are the result of a fall<sup>6</sup>. Of those that sustain a hip fracture, 25% of older adults will perish in the following year.<sup>6</sup> In addition, falls are the leading cause of injury deaths among older adults in Florida.<sup>8</sup> In 2012, traumatic brain injury, alone, was associated with 57% of fall-related deaths among Floridians, ages 65 and older.<sup>9</sup>

## Summary

- Older adults are a very diverse group of people.
- A fall is the act of unintentionally coming to rest on the ground, floor, or lower level.
- Older adults falls are responsible for significant physical, personal, social, and economic burden.
- Many risk factors for older adults' falls are preventable or easily treated.

## Key Terms

**Fall:** the act of unintentionally coming to rest on the ground, floor, or lower level

**Community-dwelling:** non-institutionalized (not residing in nursing homes)

**Incidence:** the number of new occurrences or cases of a disease or condition over a period of time

**Median:** an midpoint of observed values; a value that has the same amount of values above as it as does below

**Older Adult:** anyone age of 65 or older

## Resources

CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults, 2<sup>nd</sup> Edition

<http://www.cdc.gov/homeandrecreationalafety/Falls/compendium.html>

Florida Department of Health's Injury Surveillance

<http://www.floridahealth.gov/statistics-and-data/florida-injury-surveillance-system/index.html>

National Center of Injury Prevention and Control (CDC)

<http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html>

National Council on Aging's Falls Prevention Awareness Day Media Toolkit

<http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/falls-prevention-awareness-1.html>

Preventing Falls: How to Develop Community-based Fall Prevention Programs for Older Adults

[http://www.cdc.gov/homeandrecreationalafety/Falls/community\\_preventfalls.html](http://www.cdc.gov/homeandrecreationalafety/Falls/community_preventfalls.html)

## References

1. Costs of falls among older adults. Centers of Disease Control and Prevention Website. <http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html> Updated September 22, 2014. Accessed December 6, 2014.
2. Agmon M, Belza B, Nguyen HQ, Logsdon RG, Kelly VE. A systematic review of interventions conducted in clinical or community settings to improve dual-task

- postural control in older adults. *Clinical Interventions in Aging*. 2014; 9: 477-492. doi: 10.2147/CIA.S54978
3. Reed-Jones, RJ, Solis, GR, Lawson, KA, Loya, AM, Cude-Islas, D, & Berger, CS. Vision and falls: A multidisciplinary review of the contributions of visual impairment to falls among older adults. *Maturitas*. 2013;75(1), 22-28. doi: 10.1016/j.maturitas.2013.01.019
  4. Grabiner, MD, Crenshaw, JR, Hurt, CP, Rosenblatt, NJ, Troy, KL. Exercised-based fall prevention: Can you be a bit more specific? *Exerc Sport Sci Rev*. 2014, 42(4):161-168. doi: 10.1249/JES.0000000000000023
  5. Chase, CA, Mann, K, Wasek, S, Arbesman, M. Systematic review of the effect of home modification and fall prevention programs on falls and the performance of community-dwelling older adults. *Am J Occup Ther*. 2012; 66, 284-291. doi: 10.5014/ajot.2012.005017
  6. Ambrose, AF, Paul, G, Hausdorff, JM. Risk factors for falls among older adults: A review of the literature. *Maturitas*. 2013;75(1), 51-61. doi: 10.1016/j.maturitas.2013.02.009
  7. Segev-Jacobovsk, O, Herman, T, Yogev-Seligmann, G, Mirelman, A, Giladi, N, Hausdorff, JM. The interplay between gait, falls, and cognition: Can cognitive therapy reduce fall risk? *Expert Rev Neurother*. 2011;11(7), 1057-1075. doi: 10.1586/ern.11.69
  8. Older adult falls prevention. Florida Department of Health website. <http://www.floridahealth.gov/programs-and-services/prevention/older-adult-falls-prevention/index.html> Accessed December 6, 2014.
  9. Injury facts- unintentional older adults falls. Florida Department of Health website. <http://www.floridahealth.gov/statistics-and-data/florida-injury-surveillance-system/documents/data-fact-sheets/older-adult-falls-2012.pdf> Accessed December 6, 2014.
  10. Karlsson, MK, Magnusson, H, von Schewelow, T, Rosengren, BE. Prevention of falls in the elderly-A review. *Osteoporos Int*. 2013; 24(3), 747-762. doi: 10.1007/s00198-012-2256-7
  11. Stubbs, B, Binnekade, T, Eggermont, L, Sepehry, AA, Patchay, S, Schofield, P. Pain and the risk for falls in community-dwelling older adults: Systematic review and meta-analysis. *Arch Phys Med Rehabil*. 2014; 95(1), 175-187. doi: 10.1016/j.apmr.2013.08.241
  12. Launay, C, De Decker, L, Annweiler, C, Kabeshova, A, Fantino, B, Beauchet, O. Association of depressive symptoms with recurrent falls: A cross-sectional elderly population based study and a systematic review. *J Nutr Health Aging*. 2013; 17(2), 152-157. doi: 10.1007/s12603-012-0370-z
  13. Enkelaar, L, Smulders, E, van Schrojenstein Lantman-de Valk, H, Weerdesteyn, V, Geurts, AC. Prospective study on risk factors for falling in elderly persons with mild to moderate intellectual disabilities. *Res Dev Disabil*. 2013;34(11):3754-3765. doi: 10.1016/j.ridd.2013.07.041
  14. Hawley-Hague, H, Boulton, E, Hall, A, Pfeiffer, K, Todd, C. Older adults' perceptions of technologies aimed at falls prevention, detection or monitoring: A systematic review. *Int J Med Inform*. 2014; 83, 416-426. doi: 10.1016/j.ijmedinf.2014.03.002

## Part 2: What Can We Do?

For the purposes of this toolkit, most intervention and awareness activities highlighted will target community-dwelling older adults.

### DID YOU KNOW?

The only intervention that has shown to reduce falls independently is evidence-based exercise/physical activity programs that include coordination and weight-bearing exercises. For this reason, incorporating interventions that address many risk factors as possible to prevent falls is so important<sup>3</sup>.

Falls among older adults have multiple risk factors; therefore, utilizing multifactorial approaches or strategies that address many factors, to older adult fall prevention is imperative. Multifactorial interventions can reduce the monthly rate of falling by older adults<sup>1</sup>.

Falls among older adults can decrease through medication management, vitamin

D/calcium supplementation, vision screenings, exercise/physical activity programs, education on health and safety, and home modifications<sup>2</sup>. Fall prevention is most effective when it addresses many factors.

In this section, we will highlight a few evidenced-based interventions and practical interventions that you can incorporate and use as your community event.

### Evidenced-Based Interventions

#### Otago

Otago is an individually-tailored older adult falls prevention intervention delivered by a physical therapist or specially trained nurse during a series of five home visits. Otago consists of balance training and leg muscle strengthening exercises and a walking plan.

Older adults are expected to follow a 30-minute exercise routine three times a week and to walk twice a week.

**Consider This:** Whether the interventions are home-based, exercises-based, or videos, developing effective multifactorial older adult falls prevention interventions require multiple disciplines such as physical therapy, optometry, nursing, pharmacy, fitness, and health education.

#### Stepping On

The Stepping On program is a multifaceted intervention that includes education and assessment of fall hazards, medication, fall risks, strength and balance exercises, vision, and community mobility. Stepping On consists of seven program sessions, a home visit, and booster sessions.

#### Tai Ji Quan: Moving for Better Balance

Tai Ji Quan: Moving for Better Balance (formerly known as Tai Chi: Moving for Better Balance) is a 24-week fall prevention program that incorporates 8-form Tai Chi. This exercise-based program aims to improve postural stability, coordination, functional walkability, body positioning, range of motion, and leg strength.

To learn more about these evidence-based interventions, please refer to the *Resources* at the end of this section. To learn about other evidence-based older adult fall interventions, in addition to the above interventions, please refer to the *CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults*

**Consider This:** When selecting your exercise-based intervention, the principal components to include, from most important to least important, are balance training, muscle strength training, flexibility, and then endurance<sup>3</sup>.



**Resource Spotlight:** NCOA Falls Prevention Awareness Day Compendium

This compendium lists activities that each state conducted on the annual Falls Prevention Awareness Day. Get ideas and learn who is participating in older adult fall prevention activities in your state. Learn more at <http://www.ncoa.org/assets/files/pdf/center-for-healthy-aging/Final-2014-Falls-Prevention-Awareness-Day-Compendium.pdf>

## Practical Interventions

### Home and Environmental Safety:



Home modifications include hazard identification, assistive technology/devices, and structural changes in and around the residence<sup>2</sup>. Fall hazards in the home such as footwear, loose rugs, poor lighting, unstable furniture, and lack of grab bars or railings pose a significant threat to older adults<sup>4</sup>. Consider employing mobile-integrated healthcare, fire departments, emergency medical services, and occupational therapists to assess the safety and older adults' ability to navigate safely through the home.

Please refer the STEADI toolkit listed in Sources at the end of Part 2 to view a home-safety checklist.

**Media Campaigns:** In addition to promotion, media campaigns are excellent strategies to influence social norms and motivate older adults to reduce their fall risk proactively.

*To learn more about promotion or media campaigns, refer to Part 4: How Do We Promote Our Event?*



**Resource Spotlight:** The Health Communicator's Social Media Toolkit

This toolkit provides guidance and tools for developing a social media intervention or campaign. Designed for beginners, The Health Communicator's Social Media Toolkit defines and provides guidance on implementation of social media tools and networks such as image sharing, online video sharing, podcasts, buttons and badges, as well as Facebook, Twitter, and Blogs. Learn more at <http://www.cdc.gov/socialmedia/tools/guidelines/socialmediatoolkit.html>

**Health Fairs:** Hosting a health fair is a great multifactorial approach to addressing falls. Health fairs can be used as a promotion and recruitment event for an evidenced-based intervention, as a linkage to care, as an intervention or all three!



**Health fairs as promotion/recruitment.** Program implementers of evidenced-based interventions can hold an interactive demonstration or session of the intervention during a health fair. Demonstrations will allow older adults to see what advantages and what activities are involved in participating in the intervention.

**Health fairs as linkage to care.** Health fairs allow free and convenient access to healthcare providers. Inviting pharmacists to do medication reviews, optometrists to do vision screenings, and physical therapists to assess gait/balance are excellent opportunities to insert older adults into the health system.

**Health fairs as interventions.** The health fair itself can serve as an intervention. Event planners can conduct education presentations on health and safety for the general public. In addition, event planners can distribute and provide education on assistive devices such as canes, walkers, or reachers.

**The following interventions can take place at a health fair or be held individual awareness activities.**

#### **DID YOU KNOW?**

Information and Communication Technologies (ICTs) such as personal emergency alarms, home automation systems, portable computers, video conferencing, robotics, and game consoles have emerged to prevent falls. Game consoles in fall prevention have shown progress in obstacle collisions in older adults participating in regular physical activity and video gaming. Video game approaches that integrate visual training with physical activity enables the inclusion of vision based interventions with known mobility and function increasing evidenced-based interventions<sup>7</sup>.

**Medication Management/Review-** Have a pharmacist provide counseling on medications that can increase the risk and assess rather a withdrawal/reduction of an older adult is possible.

**Vitamin D/Calcium Supplements-** Vitamin D/ Calcium Supplementation does not prevent a fall; however, they can reduce the likelihood of obtaining a fracture after a fall<sup>5</sup>. Employ a physician to provide guidance on proper Vitamin D/ Calcium Supplementation.

**Health and Safety Education-** Employ health educators and health providers to conduct interactive and efficient health education presentations on older adult falls.

**Assistive Technology/Devices Distribution-** Educate on the proper use of assistive devices<sup>6</sup>. Assistive devices promote independence that can eliminate older adults' fear of being a burden or being placed in a long-term care facility, while fostering a social life.

**Vision Screenings-** Visual impairments reduce an older adult's ability to detect environmental hazards<sup>7</sup>. In addition, vision loss is the third most common chronic condition among older adults<sup>7</sup>. Though some conditions that can cause vision loss are preventable through early detection, less than 50% of insured individuals utilized eye exams<sup>7</sup>. Employing optometrists to conduct vision screening and correction can considerably reduce vision loss.



**Validated Fall Risk Assessment Tools-** Several tools are available to assess mobility, balance, and muscle leg strength. These tools can alert health professionals of older adults with a high fall risk and also serve as evaluation measures for fall prevention interventions. The Timed Up and Go (TUG) Test assesses a patient's mobility, the Four Stage Balance Test assesses an older adult's balance, and the 30-Second Chair Stand Test assesses an older adult's muscle leg strength.

Refer to the STEADI Toolkit link to learn more about these Validated Fall Risk Assessment Tools.



**Resource Spotlight:** Stopping Elderly Accidents, Deaths, and Injuries (STEADI) Toolkit

The CDC developed *STEADI* to inform and provide resources for healthcare providers to detect and assess fall risks among older adults. Learn more at <http://www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html#download>

## Summary

- The only intervention that has shown to reduce falls independently is evidence-based exercise/physical activity programs that include coordination and weight-bearing exercises.
- Fall prevention intervention and activities should address as many risk factors as possible.
- Health fairs are an excellent strategy to address many risk factors for falls at one time.

## Key Terms

**Multifactorial:** having many factors

## Resources

The Health Communicator's Social Media Toolkit

<http://www.cdc.gov/socialmedia/tools/guidelines/socialmediatoolkit.html>

NCOA Falls Prevention Awareness Day Compendium

<http://www.ncoa.org/assets/files/pdf/center-for-healthy-aging/Final-2014-Falls-Prevention-Awareness-Day-Compendium.pdf>

Otago Exercise Program

[http://www.acc.co.nz/PRD\\_EXT\\_CSMP/groups/external\\_providers/documents/publications\\_promotion/prd\\_ctrb118334.pdf](http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_providers/documents/publications_promotion/prd_ctrb118334.pdf)

STEADI: Stopping Elderly Accidents, Deaths, and Injuries (STEADI) Toolkit

<http://www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html#download>

## DID YOU KNOW?

Falls are often inadequately reported and scarcely understood. The lack of training on and the lack of assessment of fall risks by health professionals is a significant barrier to older adult fall prevention. For example, although there is evidence to support the association between falls and depression, the relationship is rarely detected in clinical practice because evaluating depression can be both tedious and challenging in daily clinical practice.

Stepping On

<http://www.steppingon.com/>

Tai Ji Quan: Moving for Better Balance

<http://www.tjqmbb.org/>

## References

1. Grabiner, MD, Crenshaw, JR, Hurt, CP, Rosenblatt, NJ, Troy, KL. Exercised-based fall prevention: Can you be a bit more specific? *Exerc Sport Sci Rev.* 2014, 42(4):161-168. doi: 10.1249/JES.0000000000000023
2. Chase, CA, Mann, K, Wasek, S, Arbesman, M. Systematic review of the effect of home modification and fall prevention programs on falls and the performance of community-dwelling older adults. *Am J Occup Ther.* 2012; 66, 284-291. doi: 10.5014/ajot.2012.005017
3. Karlsson, MK, Magnusson, H, von Schewelow, T, Rosengren, BE. Prevention of falls in the elderly-A review. *Osteoporos Int.* 2013; 24(3), 747-762. doi: 10.1007/s00198-012-2256-7
4. Ambrose, AF, Paul, G, Hausdorff, JM. Risk factors for falls among older adults: A review of the literature. *Maturitas.* 2013;75(1), 51-61. doi: 10.1016/j.maturitas.2013.02.009
5. Guo, JL, Tsai, YY, Liao, JY, Tu, HM, Huang, CM. Interventions to reduce the number of falls among older adults with/without cognitive impairment: An exploratory meta-analysis. *Int J Geriatr Psychiatry.* 2014; 29(7), 661–669. doi: 10.1002/gps.4056
6. Hawley-Hague, H, Boulton, E, Hall, A, Pfeiffer, K, Todd, C. Older adults' perceptions of technologies aimed at falls prevention, detection or monitoring: A systematic review. *Int J Med Inform.* 2014; 83, 416-426. doi: 10.1016/j.ijmedinf.2014.03.002
7. Reed-Jones, RJ, Solis, GR, Lawson, KA, Loya, AM, Cude-Islas, D, & Berger, CS. Vision and falls: A multidisciplinary review of the contributions of visual impairment to falls among older adults. *Maturitas.* 2013;75(1), 22-28. doi: 10.1016/j.maturitas.2013.01.019

## Part 3: How Do We Conduct a Community Event?

Depending on your event, preparation can take months or even a year.

### Planning a community event involves the following steps:

1. Select a staff member or team to lead community event planning efforts
2. Conduct a need/community assessment
3. Identify the purpose and goals of your community event
4. Select your intervention
5. Recruit and plan your community event
6. Promote your community event
7. Implement your community event
8. Evaluate your community event
9. Sustain your community event

Though these steps are given chronologically, many occur simultaneously.

*A timeline of the above information can be found in **Appendix A**.*

### Step 1: Select a staff member or team to lead community event planning efforts

Before you can plan an event, you must delegate a person or team to lead the project. During each phase of planning, this will be the person(s) who is ultimately responsible for the community event. If a team is selected, each member should understand what their responsibility is in the project to prevent and reduce misunderstanding or competition for power. You may want to divide roles into program lead, funding lead, recruitment lead, promotion lead, and evaluation lead. However, if you decide to delegate responsibilities, ensure that each team member feels that he/she has a valuable role in the creation and implementation of the community event.



*Use **Appendix B** to select planning leads.*

### Step 2: Conduct a need/community assessment

As discussed in Part 1, older adults differ in many ways including age, gender, ethnicity, and culture. Event planners should conduct assessments to determine the demographics of the older adult population and the burden of falls in their community. In addition, event planners should also assess whether a community is ready for or interested in an older adult falls intervention. If a community is not interested nor ready for an intervention, the event will not be successful. In the case where there is little interest or community readiness for an intervention, it is best to conduct awareness or media campaigns to promote the health issue. You can learn more about awareness and media campaigns in *Part 4. How to Promote a Community Event?*

You can complete your needs assessment through an interview, survey, or focus groups of key informants. Key informants are older adults, professionals or organizations that serve older adults, community members, or community leaders. **Appendix C** includes example questions to survey or interview key informants. Be sure to interview professionals or organizations that

serve older adults as they may already have answers to many questions in your needs assessment. You can also employ researchers and students at local universities and colleges to assist you with your need assessments and evaluations.

Please complete a need/community assessment **BEFORE** you plan any event. This assessment will be used throughout each of the remaining steps of the community planning process.

*Use **Appendix C and D** to conduct your need/community assessment.*

### **Step 3: Identify the purpose and goals of your community event**

Steps 3 and 4 are imperative and can occur simultaneously. During these steps, planners identify the purpose and desired outcomes of the chosen intervention. Setting goals and objectives are imperative because they serve as prerequisites for your evaluation of the community event. Goals and objectives determine rather an intervention was successful.

#### **Establishing Your Goal**

Goals for the purpose of this toolkit are the broad and desirable end results of your intervention. Goals are short and do not have to be complete sentences. A goal merely states what will be changed by your intervention and who will be changed by your intervention. Your goals are directly developed from the “Actions Needed” in your need/community assessment (**Appendix D**).

**Example:** If a key finding of your needs assessment was that older adults were not aware of community resources available to prevent falls, then your “actions needed” should be to increase awareness. Therefore, your goal could be written as follows:

To increase awareness about community resources among older adults.

Awareness is *what* is being changed, and older adults are *who* are being changed.

### **Step 4: Selecting Your Intervention**

Once you have established your goal or purpose, it is time to select an intervention. Select an intervention that best aligns with your goals. If your goal is to increase awareness, decide which intervention would be best to increase awareness. Possible awareness interventions include media campaigns and health fairs.

*Consult Part 2: What Can We Do? for potential interventions.*

#### **Developing Intervention Objectives**

Intervention objectives are more specific than goals. Intervention objectives tell the who, what, by how much, when, where, and how (Refer to Table 2).

**Table 2. Intervention Objectives' Components**

What:	What is the desired behavior or outcome that is being changed?
By how much:	By what measure is the desired behavior/outcome being changed?
Who:	Who is the goal or objective targeting; who is being changed?
Where:	Where will this change occur?
How:	How will this change occur?
When:	When will this change occur; what is the deadline?

**Example:** If your need assessment revealed a lack of awareness about services among older adults, an objective to resolve this would be:

To increase awareness about community resources by 5% among older adults through educational presentations at a health fair on September 23, 2015

What: Increase Awareness

By how much: 5%

Who: Among older adults

Where: At a health fair

How: Educational presentations

When: On September 23, 2015

Record your goals, intervention, and objectives in **Appendix E**. Then, distribute completed copies of the **Appendix E** to all persons involved in the event planning process. Distributing the updated **Appendix E** will ensure that each member of the planning committee has a clear understanding of the purpose of the community event.

### **Step 5: Recruit and plan your community event**

Now that you have selected your intervention, it is time to recruit and plan for your community event.

#### **DID YOU KNOW?**

Preventing Falls: How to Develop Community-based Fall Prevention Programs for Older Adults has two tools, located on pages 10-11, that are excellent resources to identify persons and settings needed to conduct a community event.

Identify and recruit any professional and personnel needed to implement your chosen intervention successfully. All newly recruited personnel and professionals are now members of your planning committee. Therefore, add each new member to your Community Event Planning Leads (**Appendix B**) and distribute the updated tool to each member of the planning committee. In addition, each member should receive a copy of the Community Event (**Appendix E**). Your newly updated planning committee should then convene a meeting(s) to plan your community event.

During these meetings, you need to discuss the following questions:

- Where will we hold the event?
- What instructional materials do we need?
- What supplies do we need to implement the event?
- What equipment do we need?
- How will we fund the event?



### **Resource Spotlight: Community and State Resource Meeting Toolkit**

The purpose of this toolkit is to provide resources to individuals and organizations that want to host a local resource meeting. The toolkit contains planning documents and meeting templates. Learn more at <http://www.floridahealth.gov/provider-and-partner-resources/advisory-councils-stakeholder-groups/injury-advisory-council/goal-teams/documents/resources-meeting-toolkit.pdf>

### **Event Location**

Many organizations offer space free or at a reduced rate. These spaces are usually available at a school, university, community center, or church. Be sure that the chosen location is easily accessible to older adults and how older adults frequently gather.

### **Instructional Materials**

There are many resources available on how to implement your chosen intervention.

*Consult Part 2: What Can We Do? for instructions on how to locate instructional materials for practical and evidence-based interventions.*

### **Equipment and Supplies**

All interventions require equipment and supplies. Determine which supplies and equipment you need, and where you can secure them.

### **Funding**

Funding can come from grants, donations, participation fees, and sponsorships. When pursuing these sources, make sure you emphasize the benefits of providing funding for your community event to the funders.

Several federal and state agencies, including the Florida Department of Health, offer grants to implement prevention efforts for older adults. You can find more information in *Part 6: Where Can We Learn More?* of the toolkit.

*Use **Appendix F and G** to plan your community event*

## **Step 6: Promote your community event**



During this step, you will reach out to community partners. Again make use of your needs assessment and partner with local community organizations and senior centers. *To learn more about promotion and building relationships with community partners, refer to Part 4: How Do We Promote Our Event?*

### Step 7: Implement your community event

You finally made it to the day of the event. Check with all essential personnel and vendors during the days and hours preceding the event to adapt to any last minutes changes and to ensure communication is clear between all parties.

*Refer to **Appendix A** for activities to do on the day of your event.*

### Step 8: Evaluate community event

Evaluation is an essential component of any intervention. Evaluations allow you to assess the success of partnerships, planning, and implementation of your community event.

*Refer to Part 5: How Do We Know It Was Successful? to learn more about evaluation.*

### Step 9: Sustain your community event

While implementing an event is an excellent accomplishment, conducting regular events and interventions produces more effective, and long term change.

*Refer to Part 5: How Do We Know It Was Successful? and **Appendix A** for techniques to maintain fall prevention efforts*

### Summary

- Planning a community event involves the following steps: (1) selecting a staff member or team to lead community event planning efforts, (2) conducting a need/community assessment, (3) identifying the purpose and goals of your community event, (4) selecting your intervention, (5) recruiting and planning your community event, (6) promoting your community event, (7) implementing your community event, (8) evaluating your community event, and (9) sustaining your community event.
- The planning steps may occur simultaneously.

### Key Terms

**Demographics:** statistical characteristics of a population, such as age, gender, socio-economic status

**Key informants:** individuals that can provide information about a group or population

**Focus group:** A discussion group that gives feedback on a topic or product

### Resources

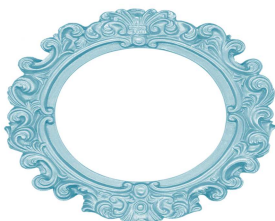
Preventing Falls: How to Develop Community-based Fall Prevention Programs for Older Adults

[http://www.cdc.gov/homeandrecreationalsafety/Falls/community\\_preventfalls.html](http://www.cdc.gov/homeandrecreationalsafety/Falls/community_preventfalls.html)  
!



## Part 4: How Do We Promote Our Event?

### Frame Your Message



How you deliver a message or promote an event is crucial to its success. A message has the power to persuade, motivate, empower, produce apathy, or even offend. Event planners must consider how its audience will receive a message. Research has shown that falls can threaten older adults' identity and independence<sup>1</sup> and that some older adults do not consider themselves at risk for falling<sup>1</sup>. For this reason, a campaign slogan that promotes a healthy lifestyle or physical activity may be better received than a campaign that simply promotes falls prevention. Use positive messaging. Although research is helpful, the best way to determine if a certain audience likes a slogan is to ask a member(s) of that audience. Survey older adults to determine if your intervention messages will be positively received by your target audience.

Sample Message Framing Survey	
Would you go to an event entitled _____? (Insert event title)	<input type="checkbox"/> Yes <input type="checkbox"/> No Why not? _____
What would you expect to occur at an event entitled _____? (Insert event title)	_____ _____
Would you go to an event that provided _____? (List services provided)	<input type="checkbox"/> Yes <input type="checkbox"/> No Why not? _____



#### **Resource Spotlight:** Adding Power to Our Voices: Framing Guide for Communicating About Injury

This guide incorporates message development techniques and theories to communicate better with your target audience. Learn more at

<http://www.cdc.gov/injury/publications/framing.html>

CDC also partnered with Safe States Alliance to conduct an online webinar on message framing. Learn more at

<http://www.safestates.org/?WebEventFramingTrain>

### Make Use of Local or National Awareness Days

Falls have many causes and consequences. Use this fact to your advantage by partnering with other health professionals to promote your cause. You can promote falls during Mental Health Month, National Physical Fitness and Sports Months, National Senior Health and Fitness Day, Men's Health Week, Healthy Aging Month, National Physical Therapy Month, National Health Education Week, Health Vision Month, Falls Prevention Awareness Day and more. You can



expand your reach and build partnerships with key stakeholders by partnering with different organizations and professional in different sectors.

To learn more about National Health Observances Days, refer to <http://healthfinder.gov/nho/>

### Use Media

Public broadcast stations are obligated to provide public service or free airtime for license renewal<sup>2</sup>. Use this to your advantage by creating short, promotional Public Service Announcement for your event on radio or television. Also, consider creating an advertisement or news release in your local newspapers and magazines.



#### **Resource Spotlight: NCOA Falls Prevention Awareness Day Toolkit**

The National Council on Aging (NCOA) created a media toolkit that includes templates for press releases, state proclamations, fact sheets, and more to promote Annual Fall Prevention Awareness Day activities. Just insert your organization's information into NCOA's templates. Learn more at <http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/falls-prevention-awareness.html>

Another inexpensive way to promote your community event and influence social norms is using social media. You can expand your reach sufficiently with considerable low labor and cost. Each “share”, “retweet”, or “like” is a gatekeeper creating access to a population or community you may not have reached on your own.



To learn more about how to use social media to create an intervention that effectively communicates health issues or influences social norms, refer to CDC's Health Communication Social Media Toolkit. To access templates to post on social media, refer to National Council on Aging Falls Prevention Day Media Toolkit.

### Make Use of Local and State Health Agencies

Health departments have expertise and access to health information and resources. They may have educational and promotional information such as fact sheets, brochures and programming available free of charge. State and local health agencies may have or can attain access to websites, community calendars and social media networks that reaches a broad audience.



### **Resource Spotlight:** Florida Department of Health-Injury Prevention Section Website

That Florida Department of Health has promotion and advocacy resources for Floridians located on its website. Resources include the Florida Coalition Map and Contact List, the Injury Prevention Calendar, a list of all the senior centers in Florida, a list of the Aging and Disability Resource Centers in Florida, and Who's Who of Injury Prevention in Florida (Injury Prevention Resource List). To learn more, visit <http://www.floridahealth.gov/programs-and-services/prevention/older-adult-falls-prevention/resources.html>

### **Advertise at Places where Older Adults Frequent**



Advertise at places where older adults frequent. Some of these places include senior centers, community centers, and religious facilities. Creating and posting banners, flyers, and fact sheets are excellent ways to advertise.

*Refer to **Appendix H** for tips to consider when developing print materials.*

You can also advertise by Word of Mouth. This method is free and often effective. Simply make an announcement at a popular older adult facility; however, make sure that you frame your message effectively.

### **Build Local Partnerships and Coalitions**

Partnerships and coalitions are excellent resources to promote an event and maintain older adult fall prevention activities. Coalitions include representatives from different sectors that convene to address a common issue in a community. Coalitions can have broad objectives such as Injury Prevention or specific objectives such as Older Adults Fall Prevention. These coalitions can also be small in size such as local and county coalitions or large such as state or national coalitions. Partnerships and coalitions often have the political and financial capacity to promote and sustain health initiatives such as your fall prevention community event. Visit Florida Department of Health's Injury Prevention website to find out more about the senior centers, local fall coalitions, and Aging and Disability Resource Centers in Florida. Get involved in these coalitions and secure support for your event.

#### **DID YOU KNOW?**

Florida's over 250 senior centers offer recreation, social interaction, education, and health services to older adults. These centers are operated by nonprofit organizations, municipal governments, county governments, and other organizations.

Learn more at

<http://www.floridahealth.gov/programs-and-services/prevention/older-adult-falls-prevention/documents/florida-senior-centers.pdf>

If your area does not have a coalition, consider building one. Refer to Community Toolbox to learn how to start and maintain a coalition. Remember to include relevant stakeholders in your coalition, including your target population (older adults).



**Resource Spotlight:** Community Toolbox-Coalition Building I: Starting a Coalition

This tool provides checklists, tools, and PowerPoints on how to start a coalition. To learn more, visit <http://ctb.ku.edu/en/table-of-contents/assessment/promotion-strategies/start-a-coalition/main>

**Advocate and Make Policy**

Advocacy for Older Adults Falls can occur at the local, state, and national level. At any level you can:



- Recognize and award individuals and organizations with are implementing older adult falls prevention strategies
- Become members and/sponsors of older adults falls prevention coalitions and partnerships
- Use social media to spread awareness on older adult falls
- Petition officials to proclaim a local older adult falls observance day
- Initiate and support policy or laws that prevent falls



**Resource Spotlight:** NCOA's State Policy Toolkit for Advancing Fall Prevention

This compendium offers strategies, processes and tools that can assist in affecting policies for older adult fall prevention. To learn more, visit <http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/state-policy-toolkit-for.html>

**Summary**

- Promote your community event by (1) framing your message, (2) making use of local or national awareness days, (3) using media, (4) using local and state health agencies, (4) advertising where older adults frequent, and (5) building local partnerships and coalitions.

**Key Terms**

**Coalition:** representatives from different sectors that convene to address a common issue in a community

**Social Norms:** Acceptable rules and behaviors of a group or population

**Resources**

Adding Power to Our Voices: Framing Guide for Communicating About Injury  
<http://www.cdc.gov/injury/publications/framing.html>

Community Toolbox  
<http://ctb.ku.edu/en/table-of-contents/assessment/promotion-strategies/start-a-coalition/main>

The Health Communicator's Social Media Toolkit  
<http://www.cdc.gov/socialmedia/tools/guidelines/socialmediatoolkit.html>

National Health Observances Days

<http://healthfinder.gov/nho/>

NCOA Falls Prevention Awareness Media Toolkit

<http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/falls-prevention-awareness.html>

## References

1. Hanson, HM, Salmoni, AW, Doyle, PC. Broadening our understanding: Approaching falls as a stigmatizing topic for older adults. *Disabil Health J.* 2009; 2(1):36-44. doi: 10.1016/j.dhjo.2008.11.001
2. Bensley, RJ, Brookins-Fisher, J. *Community Health Education Methods: A practical guide.* 3<sup>rd</sup> ed. Sudbury, MA: Jones and Baretlett Publishers; 2009.

## Part 5: How Do We Know It Was Successful?

### Evaluation

Evaluation is imperative to determine if you accomplished all that you aim to do. Evaluation

#### PERFORMANCE



should occur before, during, and after any intervention or event.

Before your event, you should evaluate your target audience, your resources, and the community climate. You completed this step when you did your needs assessment. This step is important because it determines where the need is and how to best address that need.

During an intervention or event, evaluate who participated in the intervention and how well the intervention was implemented according to plan. At the conclusion of any intervention, it is best to determine if

the intervention achieved the desired objectives. To learn more about evaluation, visit *Community Toolbox*.

Use **Appendix I** to evaluate your program from beginning to end.

### Sustainability

The success of an intervention or community event is determined by how well it is supported. Often program planners fail to assess and address components of an intervention that are essential to its success. Change takes time and hosting only one event or addressing only one aspect of the problem is not enough to have a sufficient impact, but it's a start.

Your organization or coalition can promote the success and sustainability of a program by doing the following:

- Designating a staff person(s) that will be responsible for older adults fall prevention events and activities
- Establishing an ongoing and committed coalition or partnership for older adult fall prevention and activities
- Conducting, updating and disseminating findings from needs assessment on a regular basis
- Evaluating each event and using results to advise future actions and community events
- Installing older adult fall prevention activities in organizations' regular programmatic procedures
- Generating support from your organization and community leaders
- Securing long-term financial sponsorships from organizations and partners
- Advocating for policy and legislature to support older adult fall prevention within the organization(s) and community
- Developing support and rapport with media outlets

Refer to **Appendix A** to learn when you should implement sustainability tips and techniques.

---

## Summary

- Evaluation should occur before, during, and after any intervention or event.
- The success of an intervention or community event is determined by how well it is supported.

## Resources

Community Toolbox- Evaluating an Initiative  
<http://ctb.ku.edu/en/evaluating-initiative>

## Part 6: Where Can We Learn More?

### Organizations

The American Geriatrics Society

<http://www.americangeriatrics.org/>

Centers of Disease Control and Prevention, National Center for Injury Prevention and Control,  
Division of Unintentional Injury Prevention

<http://www.cdc.gov/injury/>

Fall Prevention Centers of Excellence

<http://stopfalls.org/>

Florida Department of Elder Affairs

<http://elderaffairs.state.fl.us/index.php>

Florida Department of Health–Injury Prevention Section

<http://www.floridahealth.gov/programs-and-services/prevention/injury-prevention/index.html>

National Council on Aging

<http://www.ncoa.org/>

National Institutes of Health–National Institute on Aging (NIA)

<http://www.nia.nih.gov/>

### Partners/Coalitions

Florida Department of Health–Injury Prevention Section

<http://www.floridahealth.gov/programs-and-services/prevention/injury-prevention/index.html>

[The Who's Who of Injury Prevention in Florida](#)

[Florida Coalition Map](#)

[Florida Seniors Centers](#)

[Established Coalition Contact List](#)

Florida Department of Elder Affairs

[Aging and Disability Resource Centers](#)

### Funding Sources

Grants.gov

[www.grant.gov](http://www.grant.gov)

Department of Health and Human Services–U.S. Administration for Community Living (ACL)

[http://www.acl.gov/Funding\\_Opportunities/Announcements/Index.aspx](http://www.acl.gov/Funding_Opportunities/Announcements/Index.aspx)

Florida Department of Health

<http://www.floridahealth.gov/>

Local corporations/ businesses

### **Advocacy/Policy**

NCOA's State Policy Toolkit for Advancing Fall Prevention

<http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/state-policy-toolkit-for.html>

### **Data Reports/Sources**

Centers of Disease Control and Prevention

<http://www.cdc.gov/homeandrecreationalafety/Falls/data.html>

Florida Department of Health

<http://www.floridahealth.gov/statistics-and-data/florida-injury-surveillance-system/index.html>

Robert Wood Johnson Foundation

<http://www.countyhealthrankings.org/>

United Health Foundation

<http://www.americashealthrankings.org/>

### **Research**

CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults, 2<sup>nd</sup> Edition

<http://www.cdc.gov/homeandrecreationalafety/Falls/compendium.html>

### **Education**

Older Adults Falls, Evaluation, Funding, Advocacy/Policy, Promotion, Coalition Building, Webinars/Podcast

Community Toolbox

<http://ctb.ku.edu/en/table-of-contents>

Centers of Disease Control and Prevention

<http://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>

Homemods.org

[www.homemods.org](http://www.homemods.org)

National Council on Aging

<http://www.ncoa.org/improve-health/falls-prevention/>

Safe States Alliance

<http://www.safestates.org/?TrainingCenter>

Florida Department of Health

<http://www.floridahealth.gov/programs-and-services/prevention/injury-prevention/resources/index.html>



# APPENDICES

This section consists of tools, checklists, directories, and organizational timelines that supplement information provided from Part 1-Part 6 of the implementation toolkit.

- A- Community Event Planning Timeline
- B- Community Event Planning Leads
- C- Need/Community Assessment Resource Chart
- D- Need/Community Assessment
- E- Community Event
- F- Event Planning
- G- Budget Planning
- H- Checklist for Effective Print Materials for Older Adults
- I- Evaluation Template

### Community Event Planning Timeline

Use this tool to guide the planning process of your community event from beginning to end. Check off each step as you complete them.

1 Year to Six Months Before Event	
<input type="checkbox"/>	Select a staff member or team to lead community event planning efforts <input type="checkbox"/> Assign responsibilities and distribute Appendix B
<input type="checkbox"/>	Conduct a need/ community assessment <input type="checkbox"/> Interview key informants <input type="checkbox"/> Record findings on Appendix E
<input type="checkbox"/>	Sustain your intervention <input type="checkbox"/> Install older adult fall prevention activities in organizations' regular programmatic procedures
Six Months to 2 Months Before Event	
<input type="checkbox"/>	Identify the purpose and goals of your community event <input type="checkbox"/> Record on Appendix F
<input type="checkbox"/>	Select your intervention <input type="checkbox"/> Develop intervention objectives and record on Appendix F <input type="checkbox"/> Distribute Appendix F to planning committee
<input type="checkbox"/>	Recruit and plan your community event <input type="checkbox"/> Add new members to Appendix B and distribute to planning committee <input type="checkbox"/> Convene a meeting(s) with all members of the newly formed planning committee <input type="checkbox"/> Use Appendix G and H to establish budget and collect all materials needed to implement event
<input type="checkbox"/>	Promote your community event <input type="checkbox"/> Aid recruitment by promoting your event among stakeholders <input type="checkbox"/> Identify and build relationships with media outlets
<input type="checkbox"/>	Sustain your community event <input type="checkbox"/> Establish or partner with an ongoing and committed coalition or partnership for older adult fall prevention and activities <input type="checkbox"/> Develop support and rapport with media outlets
2 Months to 1 Day Before Event	
<input type="checkbox"/>	Recruit and plan your community event
<input type="checkbox"/>	Promote your community event <input type="checkbox"/> Promote event among target population (older adults)
<input type="checkbox"/>	Sustain your community event <input type="checkbox"/> Generate support from your organization's and community's leaders
Day of Event and After	
<input type="checkbox"/>	Implement your community event <input type="checkbox"/> Maintain communication with essential personnel and vendors during event
<input type="checkbox"/>	Evaluate your community event <input type="checkbox"/> Use Appendix I to evaluate your community event
<input type="checkbox"/>	Sustain your community event <input type="checkbox"/> Update and disseminate findings from needs assessment on a regular basis <input type="checkbox"/> Secure long-term financial sponsorships from the organizations or partners <input type="checkbox"/> Advocate for policy and legislature to support older adult fall prevention

Refer to *Part 3: How Do We Conduct a Community Event?* of the toolkit for further instruction.

### Community Event Planning Leads

After you have selected your planning leaders, list each lead's name, title, responsibilities, and contact information in the chart below. Once the chart is completed, disseminate this tool to each person involved in the community event.

\*This list will expand as you recruit additional members for the event\*

Name	Title/Role	Responsibilities	Contact Information

### Need/Community Assessment Resource Chart

Below are resources and strategies to answer key questions in your need/community assessment. Use this chart to complete for Need/Community Assessment in Appendix D. **Strategies and Resources to Answer** are suggestions, not requirements.

Questions to Consider		Strategies and Resources to Answer	
1	What are the demographics my community (number of older adults, races/ethnicities, income levels, etc.)?	<ul style="list-style-type: none"> <li>• <a href="#">America's Health Rankings</a></li> <li>• <a href="#">County Health Rankings</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Florida's County Health Profiles</a></li> </ul>
2	Who are the faith and community-based organizations (CBOs) serving older adults in my community? What services are they providing and to whom? Are they delivering these services in a meaningful way?	<ul style="list-style-type: none"> <li>• <a href="#">Senior Centers</a></li> <li>• <a href="#">Area Agencies on Aging</a></li> </ul>	<ul style="list-style-type: none"> <li>• Churches</li> <li>• YMCAs</li> </ul>
3	What are the various intervention strategies being used in my community to address older adult falls? Are these practices demonstrating any clear outcomes?	<ul style="list-style-type: none"> <li>• Interview intervention implementers</li> </ul>	
4	Who are the leaders in my community? What government officials are concerned with older adult fall prevention?	<ul style="list-style-type: none"> <li>• Spiritual Leaders</li> <li>• Government Officials</li> </ul>	<ul style="list-style-type: none"> <li>• Leaders of organizations that serve older adults</li> <li>• <a href="#">Health Departments</a></li> </ul>
5	Who are the people in my community who care about preventing falls among older adults (i.e. stakeholders)?	<ul style="list-style-type: none"> <li>• Older Adults</li> <li>• Health professionals</li> <li>• CBOs</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Health Departments</a></li> <li>• Public Safety (EMS, Fire Departments)</li> </ul>
6	Are there partnering opportunities with other nonprofits or faith-based and CBOs?	<ul style="list-style-type: none"> <li>• Interview organization leaders</li> </ul>	
7	What are the gaps in service to older adults in the community? What would a complete system look like?	Refer to Part 1 of the toolkit. List what fall risk factors are not being addressed in the community.	
8	Do older adults know about the resources available? Why are older adults not using resources? What organizations should be providing older adult prevention, but are not?	<ul style="list-style-type: none"> <li>• Survey</li> <li>• Interview</li> </ul>	<ul style="list-style-type: none"> <li>• Focus Group</li> </ul>
9	What do local residents (older adults) see as the primary needs for this community?	<ul style="list-style-type: none"> <li>• Survey</li> <li>• Interview</li> </ul>	<ul style="list-style-type: none"> <li>• Focus Group</li> </ul>
10	Are community members ready for a change in the issue we are trying to address?	<ul style="list-style-type: none"> <li>• Survey</li> <li>• Interview</li> </ul>	<ul style="list-style-type: none"> <li>• Focus Group</li> </ul>
Adapted from Conducting a Community Assessment. Compassion Capital Fund (CCF) National Resource Center website. <a href="http://strengtheningnonprofits.org/resources/guidebooks/Community_Assessment.pdf">http://strengtheningnonprofits.org/resources/guidebooks/Community_Assessment.pdf</a> Accessed December 7, 2014.			

Refer to Part 3, pages 10-12, of the toolkit for further instruction.

### Need/Community Assessment

Instructions: (1) Use Appendix C to fill in the **Strategies and Resources to Answer**. (2) Identify the **Key Findings** from your **Questions to Consider**, and then (3) determine the **Action(s) Needed** to address the **Key Findings**.

	Questions to Consider	Strategies and Resources to Answer	Key Findings	Action(s) Needed
1	What are the demographics my community (number of older adults, races/ethnicities, income levels, etc.)?			
2	Who are the faith- and community-based organizations (CBOs) serving older adults in my community? What services are they providing and to whom? Are they delivering these services in a meaningful way?			
3	What are the various intervention strategies being used in my community to address older adult falls? Are these practices demonstrating any clear outcomes?			
4	Who are the leaders in my community? What government officials are concerned with older adult fall prevention?			

Refer to Part 3, page 10-12, of the toolkit for further instruction.

## Appendix D- Need/Community Assessment

5	Who are the people in my community who care about preventing falls among older adults (i.e. stakeholders)?			
6	Are there partnering opportunities with other nonprofits or faith-based and CBOs?			
7	What are the gaps in service to older adults in the community? What would a complete system look like?			
8	Do older adults know about the resources available? Why are older adults not using resources? What organizations should be providing older adult prevention, but are not?			
9	What do local residents (older adults) see as the primary needs for this community?			
10	Are community members ready for a change in the issue we are trying to address?			
Adapted from Conducting a Community Assessment. Compassion Capital Fund (CCF) National Resource Center website. <a href="http://strengtheningnonprofits.org/resources/guidebooks/Community_Assessment.pdf">http://strengtheningnonprofits.org/resources/guidebooks/Community_Assessment.pdf</a> Accessed December 7, 2014.				

Refer to Part 3, page 10-12, of the toolkit for further instruction.

## Community Event

Instructions: Record your goals, intervention, and objectives below. Distribute copies of this completed worksheet to all persons involved in the event planning process.

### Goals:

---

---

---

---

**Intervention:**

---

### Objectives:

[illegible]

Refer to Part 3, pages 11-12, of the toolkit for further instruction.

## Event Planning

Fill in the chart below.

Vendor					
Name	Address		Price	Date Secured	Resource Person/Place
Is the vendor accessible to older adults?	Y <input type="checkbox"/> N <input type="checkbox"/>		Does the vendor have adequate services/technology needed to conduct the community event (i.e. computers, sound system, outlets)?		Y <input type="checkbox"/> N <input type="checkbox"/>
Is the vendor located where older adults frequent?	Y <input type="checkbox"/> N <input type="checkbox"/>				Y <input type="checkbox"/> N <input type="checkbox"/>
Instructional Materials					
Name		Price	Date Secured	Resource Person/Place	
Are the instructional materials evidence-based?	Y <input type="checkbox"/> N <input type="checkbox"/>		Are the materials from an established program or intervention?		Y <input type="checkbox"/> N <input type="checkbox"/>
Did the planners create instructional materials?	Y <input type="checkbox"/> N <input type="checkbox"/>				Y <input type="checkbox"/> N <input type="checkbox"/>
Supplies/Personnel					
Name		Price/Donated	Date Secured	Resource Person/Place	
Promotion					
Total					

Refer to Part 3, pages 12-14, of the toolkit for further instruction.



### Budget Planning

Use the **Planning** table to brainstorm potential funding sources. Use the **Budget** table to record funding sources used in your community event.

Planning		
Potential Sponsors	Potential Amount	Contact Information
Potential Grants/Donations	Potential Amount	Contact Information
Potential participation fee amount	\$	

Budget				
Funding Source	Type*	Amount	Date Secured	Resource Person
<b>Total Funded</b>				
<b>Total Expenses</b>				
<b>Balance</b>				

\*Sp=Sponsored, Gr=Grant, PF= Participation Fee, Do=Donation, and Ot=Other

Refer to Part 3, pages 12-14, of the toolkit for further instruction.

### Checklist for Effective Print Materials for Older Adults

Use this checklist to improve your print materials. Revise your print materials until all or most of the boxes are checked below.

<input type="checkbox"/>	Important information is presented first and at top left of print material
<input type="checkbox"/>	Large font (minimum 14 font) is used on all print materials
<input type="checkbox"/>	There is strong contrast between the text and the background, preferably very dark print on light background
<input type="checkbox"/>	Capitals, boldface, italics, underline, arrows, or bullets is used <b>only</b> to emphasize important information
<input type="checkbox"/>	A maximum of two fonts is used throughout the print material
<input type="checkbox"/>	Text is left-justified
<input type="checkbox"/>	The print material does not include cursive font styles
<input type="checkbox"/>	The print materials consists of mostly short sentences
<input type="checkbox"/>	Difficult or uncommon terms are limited and defined
<input type="checkbox"/>	The print material has graphics
<input type="checkbox"/>	Graphics are presented at the edge of page, and not flowing within text.
<input type="checkbox"/>	The print material defines difficult or uncommon terms
<input type="checkbox"/>	The print material uses ample white space and is not crowded
<input type="checkbox"/>	The print material uses active voice
<input type="checkbox"/>	The print materials is in plain language
<input type="checkbox"/>	Graphics and language is culturally appropriate
<input type="checkbox"/>	Print materials was pre-tested on target audience

Adapted from Bensley, R.J, Brookins-Fisher, J. Community Health Education Methods: A practical guide. 3<sup>rd</sup> ed. Sudbury, MA: Jones and Baretlett Publishers; 2009: 221-229

Refer to *Part 4: How Do We Promote Our Event?* of the toolkit for further instruction.

## Evaluation

Below are sample evaluation questions for your community event. Use these questions to determine if your event was successful.

<ul style="list-style-type: none"><li>• How many older adults participated?</li></ul>
<ul style="list-style-type: none"><li>• How representative of the community were the older adults who participated?</li></ul>
<ul style="list-style-type: none"><li>• What impact did the intervention have on all participants (i.e. change in behavior, awareness, knowledge, attitude, or health)?</li></ul>
<ul style="list-style-type: none"><li>• How many organizations or professionals participated in the implementation of event?</li></ul>
<ul style="list-style-type: none"><li>• How representative of the community were the organizations or professionals who participated in the implementation of event?</li></ul>
<ul style="list-style-type: none"><li>• Was the community event implemented as planned? How was it modified?</li></ul>
<ul style="list-style-type: none"><li>• What were the long-term effects of the community event?</li></ul>
<ul style="list-style-type: none"><li>• To what extent were older adult fall preventions activities sustained over time (i.e. funded, organizational policy and programming, coalition or partnerships)?</li></ul>
Adapted from the Reach Effectiveness Adoption Implementation Maintenance. Virginia Polytechnic Institute and State University website. <a href="http://www.re-aim.hnfe.vt.edu/about_re-aim/index.html">http://www.re-aim.hnfe.vt.edu/about_re-aim/index.html</a> Accessed December 29, 2014.